[57]

## **ABSTRACT**

The novel metallocenes of the formula I

$$(R^{10})_{8} \qquad (I)$$

$$R^{3} \qquad R^{5} \qquad (CR^{6}R^{9})_{m}$$

$$R^{2} \qquad (CR^{6}R^{9})_{n}$$

$$R^{4} \qquad (CR^{6}R^{9})_{n}$$

in which, preferably, M<sup>1</sup> is Zr or Hf, R<sup>1</sup> and R<sup>2</sup> are alkyl or halogen, R<sup>3</sup> and R<sup>4</sup> are hydrogen, R<sup>5</sup> and R<sup>6</sup> are alkyl or haloalkyl, —(CR<sup>8</sup>R<sup>9</sup>)<sub>m</sub>—R<sup>7</sup>—(CR<sup>8</sup>R<sup>9</sup>)<sub>n</sub>— is a single-or multi-membered chain in which R<sup>7</sup> may also be a (substituted) hetero atom, m+n is zero or 1, and R<sup>10</sup> is hydrogen, form, together with aluminoxanes as cocatalysts, a very effective catalyst system for the preparation of polyolefins of high stereospecificity and high melting point.

15 Claims, No Drawings